

Sub D1
Q1
concl'd

110C, and 110D. By orienting corresponding ones of the electrical traces (e.g., electrical traces 121, 122, 123, etc.) to traverse the apertures such that the relative direction of current flows therethrough opposes that through neighboring ones of the electrical connections, compensating and opposing crosstalk signals may be induced at the integrated transformer structures to provide crosstalk cancellation. In some configurations, electrical traces (e.g., 121, 122, 123, etc.) may be defined over (or under) an opening in the voltage plane below (or above). In other configurations, the electrical traces may be defined coplanar with the voltage plane and simply traverse in apertures defined therein. In such configurations, electrical traces and voltage planes may be formed using any suitable conventional process. Materials (such as metals, doped polysilicon, etc.) suitable for a particular electrical assembly will be appreciated by persons of ordinary skill in the art.

In the Claims

Please amend claims 1-3 and 9-11 as follows:

Sub D2
Q2

1. (Amended) An electrical assembly comprising:

traces extending toward respective off-assembly connections; and

integrated transformer structures defined along the traces to induce compensating crosstalk signals having an opposing polarity which opposes initial crosstalk signals that are associated with mutual coupling between adjacent off-assembly connections, wherein one or more of the integrated transformer structures each comprises an aperture in a voltage plane of the electrical assembly and portions of the traces that are essentially parallel to each other and which traverse a respective aperture.

2. (Amended) The electrical assembly of claim 1, wherein said portions of the traces pass over or under the respective aperture.

3. (Amended) The electrical assembly of claim 1, wherein the said portions of the traces are coplanar with the voltage plane.

9. The electrical assembly of claim 1,